

CLAIMS

1. A traveling hydraulic working machine comprising at least one prime mover (1), a machine body (101) for mounting said prime mover thereon, traveling means (3) mounted on said machine body and including a torque converter (31) coupled to said prime mover, a hydraulic pump (12) driven by said prime mover, at least one working actuator (13-16) operated by a hydraulic fluid supplied from said hydraulic pump, and an operating device (23-26) for generating an operation signal to control said working actuator, said traveling hydraulic working machine further comprising:

input means (42) for commanding a target revolution speed of said prime mover (1);

first detection means (47) for detecting an operating situation of said working actuator (13-16);

second detection means (45, 46) for detecting an operating situation of said traveling means (3); and

prime-mover revolution speed control means (52-59) for modifying the target revolution speed of said prime mover based on the operating situation of said working actuator detected by said first detection means and the operating situation of said traveling means detected by said second detection means, and controlling the revolution speed of said prime mover.

2. The traveling hydraulic working machine according to Claim 1, wherein said first detection means includes means

(44) for detecting at least one of a delivery pressure of said hydraulic pump (12) and a driving pressure of said working actuator (13-16).

3. The traveling hydraulic working machine according to Claim 2, wherein said first detection means further includes means (47A) for detecting the operation signal generated from said operating device (23).

4. The traveling hydraulic working machine according to Claim 1, wherein said second detection means is means (45, 46) for detecting input and output revolution speeds of said torque converter (31), and said prime-mover revolution speed control means includes means (53, 54) for computing a torque converter speed ratio from input and output revolution speeds of said torque converter, and determining the operating situation of said traveling means (3).

5. The traveling hydraulic working machine according to Claim 1, wherein said prime-mover revolution speed control means includes means (52-56) for computing a modification revolution speed of said prime mover (1) when the operating situation of said working actuator (13-16) detected by said first detection means (44) and the operating situation of said traveling means (3) detected by said second detection means (45, 46) come into respective particular states, and means (59) for subtracting the modification revolution speed from the target revolution speed of said prime mover.

6. The traveling hydraulic working machine according to Claim 1, wherein said prime-mover revolution speed control means includes means (52-54, 56, 59) for modifying the target revolution speed of said prime mover (1) to reduce when the operating situation of said traveling means (3) is in a state close to a stall of said torque converter and the operating situation of said working actuator (13-16) comes into a light load state.

7. The traveling hydraulic working machine according to Claim 1, wherein said prime-mover revolution speed control means includes means (52A, 53, 54A, 56, 59) for modifying the target revolution speed of said prime mover (1) to reduce when the operating situation of said traveling means (3) is in a state far from a stall of said torque converter and the operating situation of said working actuator (13-16) comes into a heavy load state.

8. The traveling hydraulic working machine according to Claim 1, further comprising third detection means (43) for detecting an input amount from said input means (42),

wherein said prime-mover revolution speed control means includes means (57, 58) for modifying the target revolution speed of said prime mover when the input amount detected by said third detection means is not smaller than a preset value.